

CLAIMS

What is claimed is:

1 1. A deployable cover for a cargo bed of a vehicle comprising:
2 a movable tonneau cover having a closed position adapted to close
3 off the cargo bed, the tonneau cover including a storage compartment; and
4 a plurality of linearly extendable supports positioned with respect to
5 the tonneau cover such that they may extend to move the tonneau cover from its
6 closed position to an upwardly extended deployed position wherein the tonneau
7 cover is substantially parallel to a bottom surface of the cargo bed; and
8 first and second side panels and a rear panel, each carried by the
9 storage compartment in a stowed position substantially parallel with a downward
10 facing surface of the tonneau cover, and wherein the side and rear panels are
11 moveable to a deployed position substantially perpendicular to the tonneau cover
12 so as to form in conjunction with the tonneau cover when in the deployed position
13 a box cover for the cargo bed.

1 2. The deployable cover of claim 1 wherein each linearly
2 extendable support is associated with a motor, each motor being coupled to a
3 control switch for simultaneous activation of the motors for extending the
4 supports.

1 3. The deployable cover of claim 2 wherein each motor
2 includes a drive gear and each extendable support includes a rack positioned for
3 engagement with a respective drive gear.

1 4. The deployable cover of claim 1 wherein the tonneau cover
2 is pivotably movable about at least one edge of the cover.

1 5. The deployable cover of claim 4 wherein the tonneau cover
2 is pivotably movable about the at least one edge in both the closed position and
3 the deployed position.

1 6. The deployable cover of claim 1 wherein at least one of the
2 side and rear panels are at least partially fashioned from a transparent material.

1 7. In a vehicle having a passenger cabin and a cargo bed
2 opening upwardly of the vehicle, a cover arrangement comprising:
3 first and second top plates extending inwardly from respective first
4 and second side panels of the cargo bed;
5 a front faring having a base extending along an edge of the cargo
6 bed adjacent the passenger cabin and having opposed side faring surfaces
7 extending rearwardly from the base between an upper frame of the front faring
8 and a respective top plate;

9 a movable tonneau cover having a closed position wherein the
10 tonneau cover extends rearwardly from the base of the front faring to a rear wall
11 of the cargo bed and in contact with the first and second top plates;

12 a plurality of linearly extendable supports positioned with respect to
13 the tonneau cover such that they may extend to move the tonneau cover from its
14 closed position to an upwardly extended deployed position wherein the tonneau
15 cover is substantially parallel to and aligned with a roof of the passenger cabin;

16 first and second side window panels;

17 a storage compartment formed in the tonneau cover for receipt of
18 the side window panels when not in use; and

19 a guide track formed in at least one of: the outboard edges of the
20 tonneau cover, the first and second top plates, and vertically extending side
21 surfaces of the front faring, the guide track arranged to receive the first and
22 second side window panels when the tonneau cover is in the deployed position.

1 8. The cover arrangement of claim 7 wherein each support is
2 housed in a side panel of the cargo bed in the vicinity of a corner of the tonneau
3 cover.

1 9. The cover arrangement of claim 8 wherein each support is
2 associated with a motor housed in a side panel of the cargo bed, each motor
3 being coupled to a control switch for simultaneous activation of the motors for
4 extending the supports.

1 10. The cover arrangement of claim 9 wherein each motor
2 includes a drive gear and each support includes a rack positioned for
3 engagement with a respective drive gear.

1 11. The cover arrangement of claim 9 wherein each motor is
2 electrically powered.

1 12. The cover arrangement of claim 7 wherein the tonneau
2 cover is pivotably movable about a front edge adjacent the front faring in both its
3 closed and deployed positions.

1 13. The cover arrangement of claim 7 further comprising first
2 and second rear corner pillars stored inside at least one of the first and second
3 cargo bed side panels and adapted to be respectively installed on the first and
4 second side panels beneath opposite corners of a rear edge of the tonneau
5 cover when in its deployed position.

1 14. The cover arrangement of claim 7 wherein the guide track
2 comprises a track formed in each of the outboard edges of the tonneau cover,
3 the first and second top plates and vertically extending portions of the rear facing
4 of the front faring for sliding receipt of the first and second side window panels
5 when the tonneau cover is in the deployed position.

1 15. The cover arrangement of claim 14 further comprising a rear
2 window panel adapted for storage in the storage compartment in the tonneau
3 cover and having at least one quick disconnect hinge half positioned at an edge
4 of the rear window panel; and

5 at least one quick disconnect hinge half attached to a rear
6 underside edge of the tonneau cover for mating receipt of the at least one hinge
7 half on the rear window panel, whereby the rear window panel can be pivotably
8 moved about the quick disconnect hinge between open and closed positions.

1 16. The cover arrangement of claim 7 further comprising a lock
2 mechanism in the tonneau cover operative in a locked state to engage a tailgate
3 of the cargo bed to prevent access to the cargo bed.

1 17. The cover arrangement of claim 7 further comprising a
2 brake-activated stoplight positioned in a rearward facing edge of the tonneau
3 cover.